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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Macphee et al.  
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FILING DATE: October 11, 2001  
PUBLICATION NO.: US 2003/0012687 A1  
PUBLICATION DATE: January 16, 2003  
TITLE: METHODS OF STERILIZING BIOLOGICAL MATERIALS

Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1415

THIRD-PARTY SUBMISSION PURSUANT TO 37 C.F.R. §1.99

Sir:

Pursuant to 37 C.F.R. § 1.99, copies of the references listed below are submitted herewith for consideration by the Office in captioned Macphee et al. U.S. patent application publication US 2003/0012687 A1, published January 16, 2003.

These publications and patents could not have been sent to the Office earlier and are accompanied by the processing fee of \$130.00 Pursuant to 37 C.F.R. § 1.17(i).

03/24/2004 MBIZUNES 00000035 09973958

01 FC:1460

130.00 OP

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postpaid in an envelope, addressed to the: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1415 on March 20, 2004.

Dated: March 20, 2004

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03/24/2004 MBIZUNES 00000036 09973958

01 FC:1806

180.00 OP

## REFERENCES SUBMITTED FOR CONSIDERATION

Bright, R. W., Friedlaender, G. E., and Sell, K. W., "Tissue banking: the United States Navy Tissue Bank," *Mil.Med.*, Vol. 142, No. 7, 1977, pp. 503-510.

Dziedzic-Goclawska, A., Ostrowski, K., Stachowicz, W., Michalik, J., and Grzesik, W., "Effect of radiation sterilization on the osteoinductive properties and the rate of remodeling of bone implants preserved by lyophilization and deep-freezing," *Clinical Orthopaedics and Related Research*, Vol. 272, 1991, pp. 30-37.

Fideler B.M., Vangsness C.T., Lu B., Orlando C., and Moore T., "Gamma irradiation: effects on biomechanical properties of human bone-patellar tendon-bone allografts," *Am J Sports Med*, Vol. 23, No. 5, 1995, pp. 643-646.

Goertzen, et al., "Sterilisation of Canine Anterior Cruciate Allografts by Gamma Irradiation in Argon. Mechanical and Neurohistological Properties Retained One Year After Transplantation", *J. Bone Joint Surg. Br.*, 77(2):205-12 1995

Hamer, A. J., Strachan, J. R., Black, M. M., Ibbotson, C. J., Stockley, I., and Elson, R. A., "Biomechanical properties of cortical allograft bone using a new method of bone strength measurement. A comparison of fresh, fresh-frozen and irradiated bone," *J.Bone Joint Surg.Br.* , Vol. 78, No. 3, 1996, pp. 363-368.

Salehpour, A., Butler, D. L., Proch, F. S., Schwartz, H. E., Feder, S. M., Doxey, C. M., and Ratcliffe, A., "Dose-dependent response of gamma irradiation on mechanical properties and related biochemical composition of goat bone-patellar tendon-bone allografts," *J.Orthop.Res.*, Vol. 13, No. 6, 1995, pp. 898-906.

Wientroub, S. and Reddi, A. H., "Influence of irradiation on the osteoinductive potential of demineralized bone matrix," *Calcif.Tissue Int.*, Vol. 42, No. 4, 1988, pp. 255-260.

### U.S. Patent

5,362,442

2,832,689

2,962,380

### Date of Publication (Grant)

November 8, 1994

April 29, 1958

November 29, 1960

Pursuant to 37 C.F.R. § 1.17(p) the fee of \$180.00 is enclosed herewith.

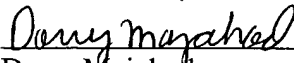
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TWO DUPLICATE COPIES OF THIS SHEET ARE ENCLOSED.

A copy of this paper and of the listed U.S. patents are being concurrently served on applicants' attorney indicated in the subject published application in compliance with 37 C.F.R. § 1.248(b).

Respectfully submitted,

Dated: March 10, 2004

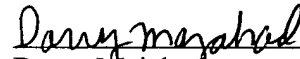
  
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The undersigned hereby certifies that a copy of the papers attached hereto and a copy of the references cited therein were served upon applicant's attorney, Fleshner & Kim, LLP, P.O. Box 221200, Chantilly, VA 20153-1200, by transmission via first class mail on March 20, 2004.

Dated: March 20, 2004

  
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